

ABSTRACT

In a surface layer of an ultra-low carbon stainless steel comprising a seal function layer in the surface layer, an ion such as a nitrogen ion is implanted to form the seal function layer. Since the ultra-low carbon stainless steel comprising the seal function layer is excellent in elasticity, sealing properties, peelability and abrasion resistance, it can make a seal material which has been used unnecessary, and can realize all stainless-made products such as seal and joint system parts.